Call for Papers

Symposium on Selected Areas in Communications: Big Data Track

Co-Chairs

Brij B. Gupta, Asia University, Taiwan Email : bbgupta@asia.edu.tw

Scope and Motivation

As human society transitions into the era of the data-driven digital economy, the digitization powered by big data has emerged as a key global trend in information technology. Data holds immense value, offering insights that can be mined and analyzed to better understand the systems from which it originates. The explosive growth in data generation from various devices has heightened the demand for advanced communication networks that facilitate the efficient transfer of massive data volumes. At the same time, improvements in data storage and processing techniques are critical to managing this data deluge. The increasing scale of data, coupled with its growing complexity, presents new challenges and opportunities. The diversity in application requirements and data processing technologies highlights the need for innovative approaches to tackle these 'Big Data' challenges.

The Big Data Track in the Selected Areas in Communications Symposium aims to attract cutting-edge submissions from academia, industry, and government, encouraging fresh scientific contributions and comprehensive literature reviews on relevant Big Data topics.

Topics of Interest

Original research articles are solicited in, but not limited to, the following topics:

- Big Data acquisition, integration, and cleaning methodologies
- Architectures, infrastructures, and platforms for Big Data
- Classifications, benchmarks, and metrics for Big Data performance
- Applications of Big Data in business and industry
- Big Data's role in scientific research and technological advancements
- Big Data in communications and computing systems
- Techniques for integrating and visualizing Big Data

- Maintenance, management, and operational strategies for Big Data systems
- Models, theories, algorithms, and approaches for Big Data analysis
- Real-world applications and best practices for Big Data
- Big Data semantics, knowledge discovery, and intelligent systems
- Standards, regulations, and policy frameworks for Big Data
- Storage and management solutions for large-scale data
- Big Data combined with artificial intelligence (AI)
- Big Data in the Internet of Things (IoT) and cyber-physical systems
- Relevant signal processing techniques for Big Data
- Cross-sectoral applications of Big Data
- Tools for evaluating, simulating, and debugging Big Data systems
- Advanced file systems and databases designed for Big Data
- Security, trust, and privacy protection in Big Data environments

Biography of the Chair

Brij B. Gupta is the Director of the International Center for AI and Cyber Security Research and Innovations (CCRI) and a Distinguished Professor in the Department of Computer Science and Information Engineering at Asia University, Taiwan. With over 18 years of experience, he has authored more than 500 papers, 35 books, and holds 12 patents, with over 30,000 citations. He is recognized globally, having been listed as a Clarivate Highly Cited Researcher and included in Stanford University's top 2% scientists from 2020 to 2023. His awards include the Canadian Commonwealth Scholarship and IEEE Outstanding Paper Awards. Prof. Gupta is an IEEE Senior Member and currently serves on the Board of Governors for IEEE CTSoc. His research interests include cybersecurity, AI, cloud computing, blockchain, and intrusion detection.

How to Submit a Paper

All papers for technical symposia should be submitted via EDAS. Full instructions on how to submit papers and important deadlines are posted at https://icc2025.ieee-icc.org/

The authors of selected papers from this symposium will be invited to submit an extended version of their work for fast-track review and possible publication in the IEEE Open Journal of the Communications Society.